

**In the Specification:**

Please delete the present specification and insert the new specification that is enclosed on the substitute specification.

**REMARKS**

The following are applicant's response to issues raised in the Office Action dated 06/18/2002.

**Specification Objections:**

The specification was objected to because a less than complete description of the plant was presented. Accordingly, the specification has been amended along the lines of the examiner's suggestions to more clearly and completely describe the plant. Its is respectfully requested that the specification objections be withdrawn.

**Rejection under 35 U.S.C. 112:**

The claim was rejected under 35 USC 112 as not being supported by a clear botanical description. Accordingly, the botanical description has been amended to more clearly describe the plant. Its is respectfully requested that the 112 rejection be withdrawn.

The claimed plant is now believed to be in condition for allowance.

**Request for information under 37 CFR 1.105:**

In response to the request for information under 37 CFR 1.105, applicants submit the enclosed documents providing the following requested information:

- A. CPVO Grant
- B. CPVO Application
- C. CPVO Proposed Denomination

The first sale date of 'Avalanche' was in the United Kingdom in the fall of 1998.

**CONCLUSION:**

A version of the substitute specification is attached showing the changes that were made.

Respectfully submitted,



Mark P. Bourgeois  
Reg. No. 37,782

# CLEMATIS PLANT NAMED 'AVALANCHE'

Botanical Classification: Clematis ×cartmanii

Variety Denomination: 'Avalanche'

5

## BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Clematis* that is grown for use as an evergreen climber on a frame or wall, or as a ground cover, shrub, tree or container plant. The new cultivar is known botanically as a *Clematis ×cartmanii* and will be referred to hereinafter by the cultivar name 'Avalanche'.

'Avalanche' was bred by the inventor in 1992 by crossing the pollen parent *Clematis paniculata* (not patented) with the seed parent *Clematis marmoraria* (not patented). The cross was conducted in a cultivated area of Hampshire, England and 'Avalanche' was selected from the resulting seedlings that flowered in 1994. Selection was based on plant vigor and flower. Panicles of cream-white flowers are produced in great profusion on the previous seasons wood. The distinguishing characteristics of 'Avalanche' are vigor, leaf shape and large male flowers. Pruning is not required when 'Avalanche' is being used as a large shrub, small tree or ground cover for a large area. However, when grown in a container or confined area, pruning is required immediately after flowering. Young foliage may have a temporary light bronze coloration when exposed to low temperatures, that disappears as temperatures rise. However, the color of mature leaves is permanently suffused with bronze markings.

'Avalanche' differs from its pollen parent, *Clematis paniculata*, in that 'Avalanche' is taller and has larger flowers. 'Avalanche' differs from its seed parent *Clematis marmoraria* in that 'Avalanche' has larger flowers and deeply lobed leaves.

30

The closest comparison plants are *Clematis* ×*cartmanii* ‘Spring Sensation’ (unpatented) and *Clematis* ×*cartmanii* ‘Joe’ (unpatented). ‘Avalanche’ is distinguishable from both comparison plants by its larger flower and increased vigor. In addition to these traits ‘Avalanche’ exhibits foliage that is wider lobed and darker green than the cultivar ‘Joe’.

The first asexual propagation was accomplished in 1994 using cuttings. The first asexual propagation was accomplished by the inventor in Hampshire, England. Since that time, under careful observation, the distinguishing characteristics have been determined stable and uniform in successive generations.

## SUMMARY OF THE INVENTION

The following represent the distinguishing characteristics of the new *Clematis* cultivar ‘Avalanche’. In combination these traits set ‘Avalanche’ apart from all other existing varieties of *Clematis* known to the inventor. ‘Avalanche’ has not been tested under all possible conditions and phenotypic differences may be observed with variations in environmental, climatic, and cultural conditions, however, without any variance in genotype.

1. At maturity *Clematis* ‘Avalanche’ exhibits bronze-purple stems and shiny green broad-lobed foliage with variable dark bronze markings.
2. *Clematis* ‘Avalanche’ exhibits increased vigor over any other *Clematis* × *cartmanii* variety known to the inventor.
3. In spring *Clematis* ‘Avalanche’ produces large cream-white flowers on the previous seasons wood.
4. *Clematis* ‘Avalanche’ is a hardy woody climber that can withstand temperatures of minus 10° Centigrade.
5. *Clematis* ‘Avalanche’ is dioecious and male.
6. *Clematis* ‘Avalanche’ is five meters in height at maturity when unpruned.

## BRIEF DESCRIPTION OF THE DRAWINGS

5 The accompanying color photographs illustrate the distinguishing traits of the new cultivar. The plants in the photographs are twenty months old were grown out of doors in Hampshire, England in three-gallon containers. The photograph on sheet 1 illustrates entire plants in bloom from a side perspective. The photograph on sheet 2 is a close-up view of the foliage. The photograph on sheet 3 is a close-up view of the flowers. All photographs are taken using conventional techniques and although foliage colors may appear different from  
10 actual colors due to light reflectance, they are as accurate as possible by conventional photography.

## BOTANICAL DESCRIPTION OF THE PLANT

15 The following is a detailed description of the *Clematis* cultivar named 'Avalanche'. Data was collected in Arroyo Grande, California from the inventor and from plants that were fourteen to twenty months old and grown in three-gallon containers out of doors. Color determinations are in accordance with the Royal Horticultural Society Colour Chart except where general color terms of ordinary dictionary significance are  
20 used. The growing requirements are similar to the species.

Botanical classification: *Clematis* × *cartmanii* 'Avalanche'.

Common name: Clematis or vase vine.

Uses: Container plant, climber for frame or wall, ground cover, shrub or small tree for large area.

25 Parentage: 'Avalanche' is a hybrid resulting from the induced hybridization of the following plants:

Female parent: unnamed *Clematis marmoraria*.

Male parent: unnamed *Clematis paniculata*.

Type: Suffrutescent perennial.

30 Vigor: Vigorous. Grows approximately 2 meters a year during the first two years.

Habit: Recumbent when used as a ground cover and scandent when given a wall or frame for support.

Height (at maturity): 5 meters in height.

Width (at maturity): 35 cm. in width.

5 Hardiness: Hardy to minus 10° Centigrade.

Propagation: Cuttings.

Root system: Fibrous.

Soil: Plant in well-drained humus-rich soils with adequate moisture.

Sunlight: Plant in semi-shade to full sun.

10 Plant sexuality: Dioecious.

Time to initiate roots: 6-8 weeks are required to produce roots on an initial cutting.

Crop time: Approximately 14 months are required to produce a finished three-gallon container from a rooted cutting.

15 Seasonal interest: Cream-white flowers in spring.

Stem:

Branching arrangement: Divaricate.

Branching habit: Recumbent on the ground and scandent with support.

Internode length: 10-13 cm. between nodes.

20 Stem diameter: .50 cm. in diameter.

Primary stem length: 120 cm. long.

Secondary stem length: 14 cm. in length.

Shape: Cylindrical and fluted.

Surface: Strigose.

25 Primary stem color: 200A.

Secondary stem color: 183A.

Trunk dimensions: 5 cm. in height from surface of soil and 1 cm. in width.

Trunk color: 200A.

Foliage:

30 Type: Evergreen.

	Leaf arrangement: Opposite.
	Leaf division: Biternate.
	Leaf shape: Trifoliate and slightly depressed along mid-vein creating a V-shape in cross-section.
5	Leaf base: <del>Rounded</del> <u>Acuminate</u> .
	Leaf apex: Apiculate and mucro at tips of mature lobes.
	Leaf venation: Pinnate with prominent mid-vein.
	Vein color (adaxial surface): 137A.
	Vein color (abaxial surface): 137A.
10	Leaf surface (adaxial): Glabrous and shiny.
	Leaf surface (abaxial): Glabrous and matte.
	Leaf attachment: Petiolate.
	Petiole dimensions: 6-10 mm. in length and 1.5 mm. in diameter.
	Petiole color: 166A.
15	Petiole shape: Tortuous when plant is used as a climber.
	Leaf margin: Entire.
	Leaf texture: Thick and leather-like.
	Leaf length: 3-4 cm. in length.
	Leaf width: 2-3 cm. in width.
20	Young leaf color (adaxial surface): 136B,C.
	Young leaf color (abaxial surface): 137B.
	Young leaf color (margin and apex): 183A.
	Mature leaf color (adaxial surface): 166A suffused over 136B,C.
	Mature leaf color (abaxial surface): 166A suffused over 136B,C.
25	Foliar fragrance: Absent.
	Flower:
	Inflorescence: Panicle.
	Flower form: Solitary.
	Color of peduncle: 144A.
30	Peduncle length: 8.5 cm. in length.

Peduncle diameter: .20 cm. in diameter.

Self cleaning or persistent: Self cleaning.

Dimensions of flower: 7.50 cm. in length and 7.50 cm. in width and 1 cm. in depth.

5 Flower shape: Discoid.

Flower sexuality: Male.

Aspect: Facing upward.

Petals: Apetalous.

Tepals: Six in number.

10 Color of tepals: 155C.

Tepal shape: Obovate.

Tepal surface: Undulate.

Tepal margin: Entire with a notched apex and lateral margins involute.

Tepal length: 3.5 cm. in length.

15 Tepal width: 2 cm.in width.

Unfused or fused: Tepals are unfused.

Blooming period: April to May.

Bud color: 145B.

Bud shape: Oval.

20 Bud dimensions: 2 cm. in length and 1 cm. in width.

Quantity of flowers: Approximately 11 per stem.

Fragrance: Faintly sweet.

Reproduction organs:

Stamens: Sixty or more.

25 Arrangement of stamens: Spirally arranged.

Color of stamens: 145A.

Dimensions of stamen: 9 mm. in length and 1.5-2 mm in diameter.

Dimensions of anther: 1 mm. in width and 1 mm. in length.

Pollen color: 157A.

30 Anther: 2 mm. in length and 1.5 mm. in width.



Anther color: 157A.

Anther shape: Flattened.

Seed: Seed production has not been observed.

## CLAIM

5           A new and distinct variety of *Clematis* plant named 'Avalanche' as  
described and illustrated.

10

15

20

25

30

## ABSTRACT

5       A new cultivar of *Clematis* named 'Avalanche' that is characterized  
by bronze-purple stems, shiny green foliage with variable bronze markings, and a  
profuse display of white flowers in spring. In combination these traits set  
'Avalanche' apart from all other existing varieties of *Clematis* known to the  
inventor.



SENT BY : 01962771071

BLACKTHORN NURSERY

A4-A4 30/06/99

17:55

PG: 2

**THE PLANT VARIETY RIGHTS OFFICE - UNITED KINGDOM  
ANNEX TO REPORT ON TECHNICAL EXAMINATION**

Requesting authority: **CPVO**

Application no: **97/1051**

Reporting authority: **UNITED KINGDOM**

Reference no. **AFP 23/188**

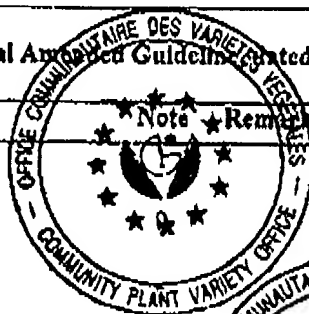
**A. Group: (If characteristics of Chapter B are used for grouping they are marked with G in that chapter)**

**Characteristics mentioned in the National Provisional Amended Guideline, dated 01-APR-95**

Characteristic	State	Note	Remarks
----------------	-------	------	---------

**B. Characteristics mentioned in the the National Provisional Amended Guideline, dated 01-APR-95**

Characteristic	State	Note	Remarks
1 Plant: growth habit	Non-climbing		
2 <del>Non-climbing varieties only:</del> Plant: height at flowering	Very tall		
3 <del>Climbing varieties only:</del> Plant: height at end of season	Not applicable		
4 Stem: smoothness 15 cm below apex	Furrowed	2	
5 Stem: pubescence 15 cm below apex	Present	9	
6 Stem: density of pubescence 15 cm below apex	Sparse to medium	4	
7 Leaf: persistence	Evergreen	2	
8 Leaf: thickness	Thick to very thick	8	
9 Leaf: division	Bitemate	4	Sometimes ternate
10 Terminal leaflet: shape (whole leaf if simple)	Not applicable	1	So deeply cut that overall shape obscured
11 Leaf: smoothness of upper surface	Smooth to slightly rugose	2	
12 Leaf: toothing of margin	Serrate	4	
13 Leaf margin: lobing	Present	9	Deeply lobed
14 Leaf: pubescence of lower surface	Present	9	



2

## B. Characteristics mentioned in the the National Provisional Amended Guideline, dated 01-APR-95

Characteristic	State	Note	Remarks
15 Leaf: density of pubescence of lower surface	Very sparse	1	
16 Leaf: main colour of upper surface	Yellow-Green 147A	-	
17 Leaf: variegation	Absent	1	
18 Leaf: secondary colour of upper surface	Not applicable	-	
19 Inflorescence: position on plant	On previous season's growth only	1	
20 Inflorescence: number of flowers	Few	3	
21 Pedicel: length	Short	3	
22 Pedicel: habit	Erect	2	
23 Pedicel: pubescence	Present	9	
24 Pedicel: density of pubescence :	Medium	5	
25 Flower: diameter	Small	3	
26 Flower: type	Single	1	
27 <u>Single varieties only</u> : Flower: shape of perianth	Flat	2	
28 <u>Single varieties only</u> : Sepals: number	Very few to few	2	
29 <u>Double varieties only</u> : Sepals: number	Not applicable	-	
30 Outer sepals: length	Short	3	
31 Outer sepals: width	Narrow to medium	4	
32 Outer sepals: length/width ratio	Very low to low	2	
33 Outer sepals: shape	Elliptic	2	Occasionally ovate
34 Outer sepals: thickness	Medium to thick	6	

3

## B. Characteristics mentioned in the the National Provisional Amended Guideline, dated 01-APR-95

Characteristic	State	Note	Remarks
35 Outer sepals: pubescence of outer surface	Present	9	
36 Outer sepals: density of pubescence of outer surface	Medium	5	
37 Outer sepals: smoothness of inner surface	Smooth to medium	4	Occasionally medium to rough
38 Outer sepals: cross-section	Concave	1	Occasionally convex
39 Outer sepals: rolling of margins	Flat	2	
40 Outer sepals: undulation of margins	Weak	3	
41 Outer sepals: central bar on inner surface	Absent	1	
42 Outer sepals: colour of inner surface excluding central bar	White 155D	-	
43 Outer sepals: colour of central bar on inner surface	Not applicable	-	
44 Stamens: colour of filaments	Not applicable	-	Yellow-green
45 Stamens: colour of anthers	Cream	2	

4

---

C. Differences from those varieties which most closely resemble the variety.

---

No closely similar varieties

---

---

D. Additional data

---

---

AFP 23/188

97/1051



EUROPEAN UNION  
Community Plant Variety Office

RECEIVED

SEP 19 2002

TECH CENTER 1600/2900

**DECISION**

**(No: 4711)**

The competent Committee for determining applications for the grant of Community Plant Variety Rights has decided, pursuant to article 62 of Council Regulation (EC) No 2100/94 (the Regulation), to grant such a right in relation to -

the variety: AVALANCHE (Application number: 97/1051)

of species: *Clematis L.*

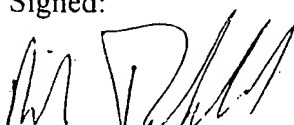
to: A.R. WHITE  
(Applicant) Blackthorn Nursery  
KILMESTON  
UK- ALRESFORD HANTS SO24 0NL

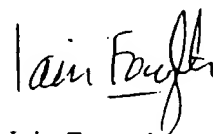
Date: 21 JUNE 1999


In connection with the grant of this Community Plant Variety Right the Committee has approved, pursuant to article 63 of the Regulation, the variety denomination -

AVALANCHE

Signed:

  
Dirk Theobald

  
Iain Forsyth

  
José Elena

Taken under the authority of the President of the Office,



The attention of the applicant is drawn to the possibility of an appeal against this decision by a third party to whom it is of direct and individual concern.